

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method of combining a water-in-oil emulsion polymer with an aqueous saline well treating fluid without precipitation and coagulation of the polymer comprising the steps of:

mixing a polymer precipitation and coagulation preventing surfactant with said aqueous saline fluid to form an aqueous saline fluid solution thereof; and

combining said water-in-oil emulsion polymer with said aqueous saline fluid solution.

2. (Original) The method of claim 1 wherein said aqueous saline fluid is selected from the group consisting of unsaturated salt water, brine and seawater.

3. (Original) The method of claim 1 wherein said aqueous saline fluid is seawater.

4. (Original) The method of claim 1 wherein said polymer precipitation and coagulation preventing surfactant is selected from the group consisting of a C₄₋₁₂ alcohol ether sulfate substituted with 3 moles of ethylene oxide, a C₉₋₁₆ alcohol ether sulfate substituted with 2.5 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 2.2 moles of ethylene oxide, a C₆₋₁₀ alcohol ether sulfate substituted with 2.5 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 8 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 6 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 12 moles of ethylene oxide, and a C₁₄₋₁₆ alpha-olefin sulfonate.

5. (Original) The method of claim 1 wherein said polymer precipitation and coagulation preventing surfactant is a C₆₋₁₀ alcohol ether sulfonate substituted with 2.5 moles of ethylene oxide.

6. (Original) The method of claim 1 wherein said polymer precipitation and coagulation preventing surfactant is present in said aqueous saline fluid solution in an amount in the range of from about 0.2% to about 1.5% by weight of water in said solution.

7. (Original) The method of claim 1 wherein said polymer in said water-in-oil emulsion is selected from the group consisting of a copolymer of styrene and butadiene; a copolymer of 2-acrylamido-2-propane sulfonic acid and N,N-dimethylacrylamide; a terpolymer of 2-acrylamido-2-propane sulfonic acid, acrylamide, and N,N-dimethylacrylamide; guar gum and derivatives thereof; cellulose derivatives; polyvinyl pyrrolidone; xanthan gum and welan gum.

8. (Original) The method of claim 7 wherein said polymer is present in said water-in-oil emulsion in an amount in the range of from 30% to about 45% by weight of said emulsion.

9. (Original) The method of claim 1 wherein said water-in-oil emulsion polymer is present in said aqueous saline fluid solution in an amount in the range of from about 5% to about 50% by weight thereof.

10. (Currently Amended) A method of treating a subterranean zone penetrated by a well bore that comprises the steps of:

preparing a treating fluid comprising an aqueous saline fluid, a polymer precipitation and coagulation preventing surfactant and a water-in-oil emulsion polymer, wherein said water-in-oil polymer does not precipitate or coagulate, wherein said step of preparing said treating fluid comprises the step of:

combining said water-in-oil emulsion polymer with an aqueous saline fluid solution comprising said aqueous saline fluid and said polymer precipitation and coagulation preventing surfactant; and

introducing said treating fluid into said subterranean zone.

11. (Original) The method of claim 10 wherein said aqueous saline fluid is selected from the group consisting of unsaturated salt water, brine and seawater.

12. (Original) The method of claim 10 wherein said aqueous saline fluid is seawater.
13. (Original) The method of claim 10 wherein said polymer precipitation and coagulation preventing surfactant is selected from the group consisting of a C₄₋₁₂ alcohol ether sulfate substituted with 3 moles of ethylene oxide, a C₉₋₁₆ alcohol ether sulfate substituted with 2.5 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 2.2 moles of ethylene oxide, a C₆₋₁₀ alcohol ether sulfate substituted with 2.5 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 8 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 6 moles of ethylene oxide, a C₈₋₁₀ alcohol ether sulfate substituted with 12 moles of ethylene oxide, and a C₁₄₋₁₆ alpha-olefin sulfonate.
14. (Original) The method of claim 10 wherein said polymer precipitation and coagulation preventing surfactant is a C₆₋₁₀ alcohol ether sulfonate substituted with 2.5 moles of ethylene oxide.
15. (Original) The method of claim 10 wherein said polymer coagulation preventing surfactant is present in said treating fluid in an amount in the range of from about 0.2% to about 1.5% by weight of water in said aqueous saline fluid therein.
16. (Original) The method of claim 10 wherein said polymer in said water-in-oil emulsion-is selected from the group consisting of a copolymer of styrene and butadiene; a copolymer of 2-acrylamido-2-propane sulfonic acid and N,N-dimethylacrylamide; a terpolymer of 2-acrylamido-2-propane sulfonic acid, acrylamide, and N,N-dimethylacrylamide; guar gum and derivatives thereof; cellulose derivatives; polyvinyl pyrrolidone; xanthan gum; and welan gum.
17. (Original) The method of claim 10 wherein said polymer is present in said water-in-oil emulsion in an amount in the range of from 30% to about 45% by weight of said water-in-oil emulsion.

18. (Original) The method of claim 10 wherein said water-in-oil emulsion polymer is present in said treating fluid in an amount in the range of from about 5% to about 50% by weight of said aqueous saline fluid therein.

19. (Original) The method of claim 10 wherein said treating fluid further comprises a hydraulic cement selected from the group consisting of Portland cements, slag cements, pozzolana cements, gypsum cements, alumina cements, and alkaline cements.

20. (Previously Presented) The method of claim 19 wherein said hydraulic cement is a Portland cement.

21 -32. (Canceled)